

CLAIMS

What is claimed is:

- 1 1. A method of generating a user interface, the method comprising the steps
2 of:
3 receiving a television signal;
4 displaying images on a display device based on the television signal;
5 determining whether secondary information associated with the
6 television signal is available; and
7 if secondary information associated with the television signal is
8 available, displaying a notification on the display device as the images are
9 being displayed.
- 1 2. A method according to claim 1, wherein the secondary information
2 associated with the television signal comprises data for generating an
3 interactive user interface.
- 1 3. A method according to claim 2, wherein the secondary information
2 comprises hypertext data associated with the television signal.
- 1 4. A method according to claim 3, wherein the hypertext data represents data
2 retrieved on a wide area network.
- 1 5. A method according to claim 3, wherein the step of displaying a
2 notification comprises the step of displaying an animated character.

1 10. A method according to claim 8, wherein the step of detecting a
2 predetermined event comprises the step of detecting the end of a television
3 advertisement.

1 11. A method according to claim 8, wherein the step of detecting a
2 predetermined event comprises the step of determining whether secondary
3 information associated with the television signal is available, wherein the
4 secondary information includes hypertext data associated with a current
5 content of the television signal.

1 12. A method according to claim 11, wherein the predetermined content
2 comprises data for generating an interactive user interface.

1 13. A method according to claim 11, wherein the predetermined content
2 comprises hypertext data corresponding to data originating from a computer
3 network.

1 14. A method according to claim 13, wherein the hypertext data comprises
2 data representing a World Wide Web page.

1 15. A method of enabling a client processing system to generate a user
2 interface, the method comprising the step of transmitting sequences of
3 instructions from a host processing system to the client processing system, the
4 sequences of instructions including instructions which, when executed on the

5 client processing system, cause the client processing system to perform the
6 method recited in claim 8.

1 16. A processing system for connection to a television set, the television set
2 having a display device, the processing system comprising:
3 a processor;
4 a receiver coupled to the processor for receiving a television signal; and
5 a memory coupled to the processor, the memory having stored therein
6 sequences of instructions for configuring the processor to:
7 cause video images on the display device based on the television
8 signal;
9 detect a predetermined event; and
10 display an animated character on the display device in response
11 to detecting the predetermined event as the video images are being displayed.

1 17. A processing system according to claim 16, wherein the event comprises a
2 user-specified event.

1 18. A processing system according to claim 16, wherein the event comprises
2 an end of a television advertisement.

1 19. A processing system according to claim 16, wherein the event comprises
2 the availability of secondary information associated with the television
3 signal, wherein the secondary information includes hypertext data associated
4 with a current content of the television signal.

1 20. A processing system according to claim 19, wherein the predetermined
2 content comprises data for generating an interactive user interface.

1 21. A processing system according to claim 19, wherein the predetermined
2 content comprises hypertext data corresponding to data originating from a
3 computer network.

1 22. A processing system according to claim 21, wherein the hypertext data
2 comprises data representing a World Wide Web page.

1 23. A method of generating a user interface in a processing system
2 connectable to a display device, the method comprising the steps of:
3 displaying an input window on the display device, the input window
4 including a plurality of icons located substantially adjacent to each other
5 along a coordinate axis;
6 in response to a user input selecting one of the icons:
7 redisplaying the input window, such that at least one of the
8 icons appears to be shifted in position along the coordinate axis; and
9 displaying information corresponding to the selected icon
10 adjacent to the selected icon along the coordinate axis.

1 24. A method according to claim 23, wherein all of the plurality of icons
2 remain visible during the step of displaying information corresponding to the
3 selected icon.

1 25. A method according to claim 23, further comprising the steps of:
2 determining when the selected icon is no longer selected;
3 when the selected icon is no longer selected:
4 ceasing to display the information corresponding to the icon in
5 the space adjacent to the icon; and
6 redisplaying the input window, such that such that the plurality
7 of icons are displayed substantially adjacent to each other.

1 26. A method according to claim 23, further comprising the step of displaying
2 full-motion video images on the display device, wherein the step of
3 displaying the input window comprises the step of displaying the input
4 window over only a portion of the video images.

1 27. A method according to claim 26, wherein the video images include real-
2 time television images.

1 28. A method according to claim 27, further comprising the step of receiving
2 hypertext data transmitted from a remote processing system.

1 29. A method according to claim 23, further comprising the step of receiving
2 a user input selecting one of the icons, the user input having been entered by
3 a user from a remote input device.

30. A method of enabling a client processing system to generate a user interface, the method comprising the step of transmitting sequences of instructions from a host processing system to the client processing system, the sequences of instructions including instructions which, when executed on the client processing system, cause the client processing system to perform the method recited in claim 23.

31. A method of generating a user interface in a client processing system connectable to a television set, the television set having a display device, the display device having a display area, the method comprising the steps of:

displaying a menu window within only a portion of the display device, the menu window including a plurality of icons located adjacent to each other, each of the icons representing a different function selectable by a user;

in response to receiving a user input selecting one of the icons:

redisplaying at least one of the icons in the menu window, such that said at least one of the icons appear to be shifted in position, to provide a space adjacent to the selected icon; and

displaying a description of the function represented by the selected icon in the space, wherein all of the plurality of icons remain visible while the description is displayed.

32. A method according to claim 31, further comprising the step of displaying video images on the display device, wherein the menu window is superimposed over at least a portion of the video images.

1 33. A method according to claim 32, wherein the video images include real-
2 time television images.

1 34. A method according to claim 33, further comprising the step of receiving
2 hypertext data transmitted from a remote processing system.

1 35. A method according to claim 31, further comprising the step of receiving
2 a user input selecting one of the icons, the user input having been entered by
3 a user from a remote input device.

36. A method of enabling a client processing system to generate a user interface, the method comprising the step of transmitting sequences of instructions from a host processing system to the client processing system, the sequences of instructions including instructions which, when executed on the client processing system, cause the client processing system to perform the method recited in claim 31.

37. In a first processing system connected to communicate with a second,
remote processing system, a method of displaying information describing a
state of communication of data between the first and second processing
systems, the method comprising the steps of:

5 displaying an object on a display device, the object having a first
6 portion and a second portion;

4 displaying a second window on the display device such that the first
5 and second windows appear to move along a common axis.

1 40. A method according to claim 39, wherein the step of displaying the second
2 window on the display device comprises the step of displaying the second
3 window on the display device to create a visual effect of the first window
4 being pushed aside by the second window.

1 41. A method according to claim 40, wherein the display device comprises a
2 television set, and wherein the method is implemented in a set-top box for
3 enabling a user to access a wide area network using the television set as the
4 display device.

1 42. A method according to claim 39, wherein the first and second windows
2 are input windows.

1 43. A method according to claim 39, wherein the step of displaying the second
2 window on the display device is in response to a user input.

1 44. A method of generating a user interface in a processing system
2 connectable to a television set, the processing system for enabling a user to
3 access a wide area computer network using the television set as a display
4 device, the television set having a display area, the method comprising the
5 steps of:

6 displaying an input field in a first portion of the display area of the
7 television set, the input field for allowing the user to enter characters to
8 specify a function of the processing system which the user wishes to access;
9 and
10 displaying a menu in a second portion of the display area while
11 displaying the input field, the menu specifying functions of the processing
12 system.

1 45. A method according to claim 44, wherein the input field is further for
2 allowing a user to enter characters corresponding to an address on the wide
3 area computer network, the address for causing the processing system to
4 communication with a remote processing system corresponding to the
5 address.

1 46. A method according to claim 45, wherein the input field is further for
2 allowing a user to enter characters specifying a hypertext link.